

**Louisiana Department of Environmental Quality (LDEQ)  
Office of Environmental Services**

**STATEMENT OF BASIS**

**BEPCO LP  
Cox Bay Compressor Station  
Port Sulphur, Plaquemines Parish, Louisiana  
Agency Interest Number: 32666  
Activity Number: PER20060002  
Proposed Permit Number: 2240-00214-V2**

**I. APPLICANT**

**Company:**

Cox Bay Compressor Station  
Two Lakeway Center  
Metairie, Louisiana 70002

**Facility:**

BEPCO LP  
5.5 Mi SE of  
Port Sulphur, Plaquemines Parish, Louisiana  
Approximate UTM coordinates are 245.60 kilometers East and 3261.90 kilometers  
North, Zone 16

**II. FACILITY AND CURRENT PERMIT STATUS**

Crude oil and gas from the nearby South Barge Production Facility are directed to Cox Bay Compressor and Oil Facility. The oil is stored on-site until pumped to a marine barge for transfer and sales. Gas is compressed and then sent through a glycol contact tower for drying. High-pressure dry gas is used as fuel for the facility and for gas-lift purposes with the excess being sold by pipeline. The glycol dehydration unit is equipped with a glycol pump flash separator where its off-gas is used as fuel for the glycol burner and the relief line is piped to a continuous-burn flare system for combustion. Still column vapors are routed through a condensing unit where its off-gas is piped to the flare system. Fluids from various skids, diked areas, and tank bottoms are pumped to a 400 barrel fluids tank at the site. A high pressure flare tip is used for emergency purposes to combust gas from pressure releases. Various gas-operated pumps and insignificant storage tanks are also utilized at this facility.

Cox Bay Compressor Station is a designated Part 70 source.

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### **III. PROPOSED PROJECT/PERMIT INFORMATION**

#### **Application**

A permit application and Emission Inventory Questionnaire were submitted by BEPCO LP on February 7, 2006, requesting a Part 70 operating permit modification. Additional information dated March 28, 2006, was also received.

#### **Project**

BEPCO LP proposes to:

- Place the cooling water pumps (EQT 1 and EQT 2) under an emission cap (GRP 3), limiting their combined operations to 11,000 hours per year.
- Remove two oil storage tanks (1-96-OST-V and 2-96-OST-V), one gas compressor engine (12-96-ICE-ES), and one flare (18a-03-F).
- Add three oil storage tanks (EQT 25, EQT 26, and EQT 27), a flare (EQT 28), and a glycol pump flash separator relief vent (EQT 29).
- Revise emission limits for Loading Losses (EQT 10) and the Continuous-Burn Flare (EQT 16) based on revised production limits.

#### **Permitted Air Emissions**

Estimated emissions in tons per year are as follows:

Pollutant	Before	After	Change
PM <sub>10</sub>	4.18	3.77	- 0.41
SO <sub>2</sub>	0.09	0.06	- 0.03
NO <sub>x</sub>	528.88	503.51	- 25.37
CO	214.12	166.26	- 47.86
VOC	282.68	40.77	- 241.91

### **IV REGULATORY ANALYSIS**

The applicability of the appropriate regulations is straightforward and provided in the Specific Requirements section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are also provided in the Specific Requirements section of the proposed permit.

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**Applicability and Exemptions of Selected Subject Items**

ID No.	Requirement	Note
EQTs 1-6	Emission Standards for Sulfur Dioxide [LAC 33:III.1503.C]	EXEMPT. Unit emits less than 250 tons of SO <sub>2</sub> per year. [LAC 33:III.1503.C]
EQTs 18 & 24	Control of Emission of Organic Compounds [LAC 33:III.2103.A]	DOES NOT APPLY. Storage capacity is less than 420,000 gallons and stores crude oil prior to custody transfer. [LAC 33:III.2103.G.3.]
EQTs 17, 18, & 24	Standards of Performance for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 [40 CFR 60, Subpart Kb]	DOES NOT APPLY. Storage capacity less than 75 cubic meters. [40 CFR 60.110b(b)]

**Prevention of Significant Deterioration/Nonattainment Review**

The pollutants are not being increased by significant amounts by the project. Therefore, the proposed facility is not subject to the requirements of the PSD program.

Unit or Plant Site	Program Being Streamlined	Stream Applicability	Overall Most Stringent Program
Cox Bay Compressor & Oil Facility	none		

**MACT Requirements**

Cox Bay Compressor & Oil Facility is a minor source of toxic air pollutants. MACT review is not required.

**Air Quality Analysis**

No dispersion modeling was performed.

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**General Condition XVII Activities**

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

**Insignificant Activities**

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

**V. PERMIT SHIELD**

There is no permit shield.

**VI. PERIODIC MONITORING**

**Compliance Assurance Monitoring**

Federal regulation 40 CFR 64-Compliance Assurance Monitoring is not applicable to this facility.

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**VII. GLOSSARY**

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

Hydrogen Sulfide (H<sub>2</sub>S) – A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the reaction of acids on metallic sulfides, and is an important chemical reagent.

New Source Review (NSR) – A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C (“Prevention of Significant Deterioration of Air Quality”) and D (“Nonattainment New Source Review”).

Nitrogen Oxides (NO<sub>x</sub>) – Compounds whose molecules consist of nitrogen and oxygen.

Organic Compound – Any compound of carbon and another element. Examples: Methane (CH<sub>4</sub>), Ethane (C<sub>2</sub>H<sub>6</sub>), Carbon Disulfide (CS<sub>2</sub>)

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM<sub>10</sub> – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient

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Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO<sub>2</sub>) – An oxide of sulfur.

Sulfuric Acid (H<sub>2</sub>SO<sub>4</sub>) – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III.Chapter 51.

Title V Permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those, which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.